

CLAIMS

This is a complete and current listing of the current claims marked with status identifiers in parentheses.

1. (Previously Presented) A method of driving a display, comprising:

correcting a grayscale level of at least one pixel to facilitate a transition from a current grayscale level to a desired grayscale level; and

reducing high frequency components in a spatial domain of the corrected at least one pixel.

2. (Currently Amended) A ~~The method of driving a display~~claim 1, comprising:wherein

~~correcting a grayscale level of at least one pixel to facilitate a transition from a current grayscale level to a desired grayscale level; and the reducing includes~~

~~reducing an unacceptable peak in a spatial domain from the corrected at least one pixel.~~

3. (Currently Amended) The method of claim 1, further comprising:

calculating a first mean of corrected grayscale levels of a first group of pixels in proximity to the at least one corrected pixel;

calculating a second mean of corrected grayscale levels of a second group of pixels in proximity to a corrected pixel determined to have an unacceptable grayscale level, upon the first mean differing from a grayscale level of the corrected pixel by more than a threshold value; and

changing the unacceptable grayscale level to a grayscale level equal to the second mean.

4. (Previously Presented) The method of claim 3, wherein the second group of pixels is relatively closer to the corrected pixel determined to have an unacceptable grayscale level, than is the first group of pixels.

5. (Previously Presented) The method of claim 3, wherein the first group of pixels is located on a segment having a midpoint at the corrected pixel determined to have an unacceptable grayscale level.

6. (Currently Amended) The method of claim 1, wherein the correcting includes ~~A method of driving a display, comprising:~~

—correcting a grayscale level of at least one pixel to facilitate a transition from a current grayscale level to a next grayscale level;—
the method further comprising:

calculating a mean difference in grayscale level between the at least one pixel and a plurality of pixels of a first group of pixels, located on a segment having a midpoint at the at least one pixel and located to one direction of the at least one pixel, calculating a mean difference in grayscale level between the at least one pixel and a plurality of the first group of pixels located to another direction of the at least one pixel, and determining that the at least one pixel has an unacceptable grayscale level upon the mean differences having different signs; and

calculating a second mean of corrected grayscale levels of a second group of pixels in proximity to the at least one pixel upon the at least one pixel being determined to have an unacceptable grayscale level; and

changing the unacceptable grayscale level to a grayscale level equal to the second mean.

7. (Previously Presented) The method of claim 6, wherein
the second group of pixels is located on a relatively shorter segment having a midpoint at the pixel, than the first group of pixels.

8. (Previously Presented) The method of claim 3, wherein there are multiple first groups of pixels located on respective segments in differing directions having a common midpoint at the specific pixel, wherein a calculation of a first mean of corrected grayscale levels is repeated for each of the first groups of pixels, and wherein a determination of whether or not the corrected pixel has an unacceptable grayscale level is made according to a combination of determinations with respect to the directions.

9. (Previously Presented) The method of claim 3, wherein a video signal for the at least one pixel corrected in the first correction step is a video signal divided into multiple blocks and wherein the first group of pixels has substantially as long a relatively longer side, as the blocks.

10. (Previously Presented) A display, comprising:

a first correction section, adapted to correct a grayscale level of at least one pixel to facilitate a transition from a current grayscale level to a desired grayscale level; and

a second correction section, adapted to reduce high frequency components in a spatial domain of the corrected at least one pixel.

11. (Currently Amended) ~~A display, comprising:~~The display of claim 10, wherein the

~~— a first correction section, adapted to correct a grayscale level of at least one pixel to facilitate a transition from a current grayscale level to a desired grayscale level; and~~

~~— a second correction section,~~ is adapted to reduce an unacceptable peak in a spatial domain of the corrected at least one pixel.

12. (Currently Amended) ~~A display, comprising:~~

~~— a first correction section, adapted to correct a grayscale level of at least one pixel to facilitate a transition from a current grayscale level to a desired grayscale level;~~The display of claim 10, further comprising:

a determination section, adapted to calculate a first mean of corrected grayscale levels of a first group of pixels in proximity to the corrected at least one pixel and adapted to determine whether the corrected at least one pixel has an unacceptable grayscale level, upon the first mean differing from a grayscale level of the corrected at least one pixel by more than a threshold value; and

a second correction section, adapted to calculate a second mean of corrected grayscale levels of a second group of pixels in proximity to the corrected at least one pixel, upon the determination section determining that the corrected at least one pixel has an unacceptable grayscale level, and adapted to change the unacceptable grayscale level of the corrected at least one pixel, to a grayscale level equal to the second mean.

13. (Previously Presented) The display of claim 12, wherein the second group of pixels is located relatively closer to the at least one corrected pixel than the first group of pixels.

14. (Previously Presented) The display of claim 12, wherein the first group of pixels is located on a segment having a midpoint at the at least one corrected pixel.

15. (Currently Amended) ~~A display, comprising:~~The display of claim 10, wherein the
~~— a first correction section, — is adapted to correct a grayscale level of at least one pixel to facilitate a transition from a current grayscale level to a next grayscale level;~~ the display further comprising:

a determination section, adapted to calculate a mean difference in grayscale level between the at least one pixel and a plurality of pixels of a first group of pixels, located on a segment having a midpoint at the at least one pixel and located to one direction of the at least one pixel, and adapted to calculate a mean difference in grayscale level between the at least one pixel and a plurality of the first group of pixels located to another direction of the at least one pixel, and adapted to determine that the at least one pixel has an unacceptable grayscale level upon the mean differences having different signs; and

a second correction section, adapted to calculate a second mean of corrected grayscale levels of a second group of pixels in proximity to the at least one pixel upon the at least one pixel being determined to have an unacceptable grayscale level and adapted to change unacceptable grayscale level to a grayscale level equal to the second mean.

16. (Previously Presented) The display of claim 15, wherein the second group of pixels is located on a relatively shorter segment having a midpoint at the pixel, than the first group of pixels.

17. (Previously Presented) The display of claim 12, wherein multiple first groups of pixels are located on respective segments in differing directions having a common midpoint at the specific pixel, the determination section being adapted to repeat the calculations for each of the first groups of pixels; and wherein the second correction section is adapted to determine the at least one pixel to have an unacceptable grayscale level according to a combination of calculations with respect to the directions.

18. (Previously Presented) The display of claim 12, wherein a video signal for the at least one pixel corrected in the first correction section is a video signal divided into multiple blocks and wherein the first group of pixels has substantially as long a relatively longer side, as the blocks.

19. (Previously Presented) The display of claim 10, wherein the display is a liquid crystal display and the at least one pixel includes at least one liquid crystal element of a liquid crystal display of a normally black, vertical align mode.

20. (Previously Presented) The display of claim 11, wherein the display is a liquid crystal display and the at least one pixel includes at least one liquid crystal element of a liquid crystal display of a normally black, vertical align mode.

21. (Previously Presented) The display of claim 12, wherein the display is a liquid crystal display and the at least one pixel includes at least one liquid crystal element of a liquid crystal display of a normally black, vertical align mode.

22. (Previously Presented) The display of claim 15, wherein the display is a liquid crystal display and the at least one pixel includes at least one liquid crystal element of a liquid crystal display of a normally black, vertical align mode.

23. (Previously Presented) A program, adapted to cause a computer to execute:

correcting a grayscale level of at least one pixel to facilitate a transition from a current grayscale level to a desired grayscale level;
and

reducing high frequency components in a spatial domain of the corrected at least one pixel.

24. (Currently Amended) ~~A program, adapted to cause a computer to execute:~~

~~—correcting a grayscale level of at least one pixels to facilitate a transition from a current grayscale level to a desired grayscale level;~~
~~and The program of claim 23, wherein the reducing includes,~~

reducing an unacceptable peak in a spatial domain from the corrected at least one pixel.

25. (Currently Amended) The program of claim 23, ~~A program,~~ adapted to cause a computer to further execute:

~~—correcting a grayscale level of at least one pixel to facilitate a transition from a current grayscale level to a desired grayscale level;~~

calculating a first mean of corrected grayscale levels of a first group of pixels in proximity to the at least one corrected pixel;

calculating a second mean of corrected grayscale levels of a second group of pixels in proximity to a corrected pixel determined to have an unacceptable grayscale level, upon the first mean differing from a grayscale level of the corrected pixel by more than a threshold value; and

changing the unacceptable grayscale level to a grayscale level equal to the second mean.

26. (Currently Amended) A—The program of claim 23, adapted to cause a computer to further execute:

correcting a grayscale level of at least one pixel to facilitate a transition from a current grayscale level to a next grayscale level;

calculating a mean difference in grayscale level between the at least one pixel and a plurality of pixels of a first group of pixels, located on a segment having a midpoint at the at least one pixel and located to one direction of the at least one pixel, calculating a mean difference in grayscale level between the at least one pixel and a plurality of the first group of pixels located to another direction of the at least one pixel, and determining that the at least one pixel has an unacceptable grayscale level upon the mean differences having different signs; and

calculating a second mean of corrected grayscale levels of a second group of pixels in proximity to the at least one pixel upon the at least one pixel being determined to have an unacceptable grayscale level; and

changing the unacceptable grayscale level to a grayscale level equal to the second mean.

27. (Previously Presented) A computer signal, comprising the program of claim 23.

28. (Previously Presented) A computer signal, comprising the program of claim 24.

29. (Previously Presented) A computer signal, comprising the program of claim 25.

30. (Previously Presented) A computer signal, comprising the program of claim 26.

31. (Previously Presented) A computer readable medium, comprising the program of claim 23.

32. (Previously Presented) A computer readable medium, comprising the program of claim 24.

33. (Previously Presented) A computer readable medium, comprising the program of claim 25.

34. (Previously Presented) A computer readable medium, comprising the program of claim 26.

35. (Previously Presented) The method of claim 1, wherein the grayscale level is increased from a desired grayscale level to facilitate a transition from a current grayscale level to a desired grayscale level.

36. (Previously Presented) The method of claim 2, wherein the grayscale level is increased from a desired grayscale level to facilitate a transition from a current grayscale level to a desired grayscale level.

37. (Previously Presented) The method of claim 3, wherein the grayscale level is increased from a desired grayscale level to facilitate a transition from a current grayscale level to a desired grayscale level.

38. (Previously Presented) The method of claim 6, wherein the grayscale level is increased from a desired grayscale level to facilitate a transition from a current grayscale level to a desired grayscale level.

39. (Currently Amended) A—The method of driving a display, ~~comprising: claim 1, further comprising:~~

~~correcting a grayscale level of at least one pixel to facilitate a transition from a current grayscale level to a desired grayscale level;~~
and

spatial filtering the corrected at least one pixel.

40. (Previously Presented) The method of claim 39, wherein the grayscale level of at least one pixel is increased to facilitate a transition from a current grayscale level to a desired grayscale level.

41. (Previously Presented) The method of claim 39, wherein the grayscale level is increased from a desired grayscale level to facilitate a transition from a current grayscale level to a desired grayscale level.

42. (Currently Amended) A—The program of claim 23, adapted to cause a computer to further execute:

~~correcting a grayscale level of at least one pixel of a display to facilitate a transition from a current grayscale level to a desired grayscale level; and~~

spatial filtering the corrected at least one pixel.

43. (Previously Presented) A computer signal, comprising the program of claim 42.

44. (Previously Presented) A computer readable medium, comprising the program of claim 42.

45. (Previously Presented) A computer readable medium, adapted to cause a computer to perform the method of claim 40.

46. (Currently Amended) A—The display of claim 10, further comprising:

~~a correction section, adapted to correct a grayscale level of at least one pixel to facilitate a transition from a current grayscale level to a desired grayscale level; and~~

a filter, adapted to spatially filter the corrected at least one pixel.

47. (Currently Amended) The display of claim 10, further comprising:

~~A display, comprising:~~

~~means for correcting a grayscale level of at least one pixel to facilitate a transition from a current grayscale level to a desired grayscale level; and~~

means for spatially filtering the corrected at least one pixel.

48. (Previously Presented) The display of claim 47, wherein the means for correcting includes overshoot driving of the display.

49. (Previously Presented) The display of claim 47, wherein the means for correcting is for increasing a grayscale level of at least one pixel to facilitate a transition from a current grayscale level to a desired grayscale level.

50. (Currently Amended) ~~A~~ The method of driving a display, claim 1, further comprising:

determining a signal for driving at least one pixel to produce a desired grayscale level from a current grayscale level; and

spatial filtering the at least one pixel.

51. (Previously Presented) The method of claim 50, wherein a grayscale level of the signal is increased from a desired grayscale

value to facilitate a transition from a current grayscale level to a desired grayscale level.

52. (Currently Amended) A—The program of claim 23, adapted to cause a computer to further execute:

determining a signal for driving at least one pixel to produce a desired grayscale level from a current grayscale level; and

spatial filtering the at least one pixel.

53. (Previously Presented) A computer signal, comprising the program of claim 52.

54. (Previously Presented) A computer readable medium, comprising the program of claim 52.

55. (Previously Presented) A computer readable medium, adapted to cause a computer to perform the method of claim 50.

56. (Currently Amended) The display of claim 10, further comprising: A display, comprising:

a device, adapted to determine a signal for driving at least one pixel to produce a desired grayscale level from a current grayscale level; and

a filtering device, adapted to spatially filter the at least one pixel.

57. (Currently Amended) The display of claim 10, further comprising: A display, comprising:

means for determining a signal for driving at least one pixel to produce a desired grayscale level from a current grayscale level; and

means for spatially filtering the at least one pixel.

58. (Previously Presented) The display of claim 57, wherein the means for determining includes determining an overshoot driving signal for the display.

59. (Previously Presented) The display of claim 57, wherein the means for determining is for increasing a grayscale level of the signal from a desired grayscale value to facilitate a transition from a current grayscale level to a desired grayscale level.